

WHAT IS CLAIMED IS:

1. An underfill system for filling gaps between semiconductor chips and substrates, comprising:

an air duct; and

a blower configured to blow air into said air duct,

wherein said air duct includes:

a main duct coupled to said blower, and

a plurality of sub-ducts each having an outlet being coupled to said main duct and an inlet of the sub-ducts to be disposed on one side of said semiconductor chip, and

wherein a filling material from a dispenser is able to fill said gap by suction due to a pressure difference between said main duct and said sub-duct.

2. The underfill system as claimed in claim 1, wherein said outlet of the sub-duct is of a smaller width than said inlet of the sub-duct.

3. The underfill system as claimed in claim 1, further comprising a valve for controlling the velocity of air blown from said blower, wherein said valve is located on said main duct between the blower and the sub-ducts.

4. The underfill system as claimed in claim 3, further comprising a timer that closes said valve to block air blown from said blower into said main duct.

5. The underfill system as claimed in claim 1, wherein said air blown from said blower is at a temperature of approximately 25°C or higher.

6. The underfill system as claimed in claim 1, wherein the blower comprises a hydraulic-type blower.

7. The underfill system as claimed in claim 1, wherein the blower comprises a fan-type blower.

8. The underfill system as claimed in claim 1, wherein the blower comprises a pneumatic-type blower.

9. A method for filling gaps between semiconductor chips and substrates using an underfill system comprising a blower structured to blow air, an air duct coupled to said blower, the air duct comprising: a main duct connected to said blower; and a plurality of sub-ducts each having an outlet being connected to said main duct and an inlet to be disposed on one side of said semiconductor chip, the inlet of the sub-duct forming a suction when the blower blows air in the air duct, the method comprising:

placing a substrate in the suction of one of the sub-ducts; and

providing a filling material to the gap from a dispenser, the filling material provided in a direction toward the inlet of the one of the sub-ducts.

10. The method of claim 9, further comprising:
blocking the flow of air along the main duct.